



SERIES 53 GUIDE SPECIFICATION

DIRECT DRIVE VANEAXIAL FAN

The Direct Drive Vaneaxial Fan shall be manufactured by Hartzell Air Movement, Series 53. Standard sizes are 18" through 42". The fan shall be a rugged two piece design. One section contains the propeller and motor. The second section contains the vanes which are aerodynamic in design to recover energy from the air stream. The fans shall be packaged, completely assembled and ready to install.

The direct drive vaneaxial propeller shall be an airfoil design, 7-bladed, one piece cast of 319 aluminum in compliance with Federal Specification QQ-A-601E and ASTM B26. The propeller shall be straight bored and attached to the motor shaft utilizing a key and setscrews. A safety plate, bolted to the motor shaft shall also provide additional attachment.

All sizes shall have rolled steel flanges continuously welded to the steel drum. All flanges have slotted mounting holes. Rigid motor mounts provide support for the motor. Motors shall be totally enclosed air over type. Motors shall be pre-wired with electrical leads extended to a watertight conduit box located on the exterior of the fan housing. Extended lube tubes and grease fittings shall be standard when relubricable motors are specified. Blowers shall be designed for mounting in any position from horizontal to vertical.

Fan housings shall be minimum 10 gauge rolled commercial quality, carbon steel and continuously welded in compliance with AWS D1.1 standard. Standard surface coating system shall be phosphatized surface preparation with industrial grade air dry enamel paint. This fan is suitable for temperatures up to 104°F.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced to the American National Standards Institute, Std. S2.19-1989 "Balance Quality of Rotating Rigid Bodies", and Grade G6.3. Fans shall be manufactured in accordance with Hartzell's standard quality assurance procedures. Fan performance shall be based on tests conducted in Hartzell's AMCA accredited test laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound. Fans shall be licensed to bear the AMCA Certified Air Performance Rating Seal.

ACCESSORIES:

- Special Construction - Available in stainless steel.
- Protective Coatings - Hot dipped galvanized, Nupon epoxy, inorganic zinc, and catalyzed coal tar epoxy are available upon request.
- Motors - Explosion proof, nodular construction, high temperature, and other special motors can be furnished upon request.
- Inlet Bell - Minimizes inlet pressure losses, thus optimizing airflow.
- Inlet/Outlet Cone - Available for adapting fans to different size duct diameters.
- Inlet/Outlet Guard - Prevents access to rotating propeller.
- Companion Flanges - Mating flanges for fan.
- Bomb Bay Doors - Provides easy access to propeller and motor and facilitates maintenance.



- Mounting Feet - To facilitate floor, ceiling or wall mounting.
- Vibration Isolators (Horizontal or Vertical Mount) - Rubber-in-shear or spring type available.
- Sound Muffler - Provides attenuation of excessive noise.
- Lifting Lugs - Provides means to lift and handle fans.
- Non-Sparking Construction - Per USCG 46CFR Standards.